Amendments to the Claims:

This listing of the claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1-14 (Cancelled).

16 (Original). The method of Claim 15, wherein said sample of WBC is taken from a subject before receiving an anti-inflammatory treatment.

17 (Original). The method according to claim 15, wherein the inflammatory state is the result of an autoimmune disease.

18 (Previously Presented). The method according to claim 17, wherein the autoimmune disease is rheumatoid arthritis (RA).

selecting a subject in an inflammatory state, which subject is suitable for anti-inflammatory therapeutic treatment by means of wherein said anti-inflammatory therapeutic treatment comprises providing said subject with_an anti-inflammatory amount of N^6 -(3-iodobenzyl)-adenosine-5'-N-methyluronamide (IB-MECA), wherein said selecting step comprises selecting the subject as being suitable to receive said anti-inflammatory therapeutic treatment by means of an anti-inflammatory amount of IB-MECA if the level determined in said determining step is above a predefined threshold that is above the level of A_3AR expression in WBCs of a healthy subject.

20 (Currently Amended). The method of Claim 15, for selecting a <u>subject in an inflammatory state</u>, which subject is a candidate for receiving anti-inflammatory therapeutic treatment under clinical studies of the effectiveness of an A3AR, wherein said selecting step comprises selecting the subject as being a candidate for said clinical studies if the level determined in said determining step is above a predefined threshold that is above the level of A3AR expression in WBCs of a healthy subject.

- 21 (New). The method of claim 15, wherein said predefined threshold is a multiple of the level of A_3AR expression in the WBCs of a healthy subject.
- 22 (New). A method for determining the probability that a selected subject in an inflammatory state will respond to anti-inflammatory therapeutic treatment by means of an A_3 adenosine receptor (A_3AR) agonist, the method comprising:

determining the level of expression of A_3AR in a sample of white blood cells (WBCs) of the subject; and

determining that there is a greater probability that the subject will respond to said anti-inflammatory therapeutic treatment if said level is above a predefined threshold that is above the level of A_3AR expression in WBCs of a healthy subject.

- 23 (New). The method of Claim 22, wherein said sample of WBC is taken from a subject before receiving an anti-inflammatory treatment.
- 24 (New). The method according to claim 22, wherein the inflammatory state is the result of an autoimmune disease.
- 25 (New). The method according to claim 24, wherein the autoimmune disease is rheumatoid arthritis (RA).
- 26 (New). The method of Claim 22, for determining the probability that a selected subject in an inflammatory state will respond to anti-inflammatory therapeutic treatment

by means of N^6 -(3-iodobenzyl)-adenosine-5'-N-methyluronamide (IB-MECA), wherein said second determining step comprises determining that there is a greater probability that the subject will respond to said treatment by means of an anti-inflammatory amount of IB-MECA if the level determined in said first determining step is above a predefined threshold that is above the level of A_3AR expression in WBCs of a healthy subject.

27 (New). The method of Claim 15, for determining the probability that said subject is a candidate for receiving anti-inflammatory therapeutic treatment under clinical studies, wherein said determining step comprises determining that there is a greater probability that the subject is a candidate for receiving said anti-inflammatory therapeutic treatment under clinical studies if said level is above a predefined threshold that is above the level of A₃AR expression in WBCs of a healthy subject.

28 (New). The method of claim 22, wherein said predefined threshold is a multiple of the level of A_3AR expression in the WBCs of a healthy subject.